

## **BEA's Strategic Plan for Maintaining and Improving its Economic Accounts: Plans and Progress (as of February 1998)**

In 1994 and 1995, BEA conducted a comprehensive review to evaluate the performance of its economic accounts and to develop a plan to maintain and improve that performance. The resulting draft Strategic Plan for maintaining and improving BEA's national, regional, and international accounts was presented to its user community in early 1995 at a national symposium of leading economic data users hosted by the U.S. Chamber of Commerce. The symposium participants enthusiastically endorsed the overall outline of the plan, although some suggested that greater emphasis be placed on certain elements of the plan or that additional actions be included. BEA modified the final plan to reflect these suggestions. The final plan puts needed improvements to the accounts in the context of a comprehensive multi-year plan that emphasizes innovation and efficiency in providing timely, accurate, and relevant information to its users in coordination with the public and with other statistical agencies. It emphasizes updated measures of output and prices; more comprehensive and accurate measures of investment, saving, and wealth; and improved coverage of international trade and finance.

Despite the long-term nature of the plan, participants urged BEA to move forward rapidly on its more critical aspects. To make a down payment on the most urgent priorities, BEA reallocated resources from existing programs. In FY 1995, BEA transferred the Leading Economic Indicators to a private organization, The Conference Board. In FY 1996, BEA phased out its regional projections and its pollution abatement and control programs and began producing its establishment-level data on foreign direct investment from a joint project with the Census Bureau on a 5-year rather than an annual cycle. In FY 1997, without any additional funds, BEA concentrated its efforts on carrying forward the strategic initiatives funded by earlier program eliminations and bringing to an orderly conclusion the programs previously targeted for elimination. Judging from comments by the users of BEA's data and the business press, substantial progress has been made on improving GDP and related economic accounts. The following initial steps in BEA's Strategic Plan have been implemented:

- o **New and Improved Measures of Output and Prices:** As part of the comprehensive revision of the accounts released in January 1996, BEA introduced new featured measures of real GDP and prices, which use annual--rather than fixed--weights that allow for the effects of changes in relative prices and in the composition of output over time. These annual weights eliminate the substitution bias associated with fixed weights.

BEA has extended the improvements made to GDP in FY 1995-96 to its estimates of GDP-by-industry, gross state product, real gross product of U.S. companies' majority-owned foreign affiliates, and capital stocks.

BEA has moved forward on updating industry classifications and on extending the quality adjustment of prices used in real GDP to products in addition to computers.

- Work on the first phase of the new industry classification system--the North American Industry Classification System--was completed with the signing by the United States, Canada, and Mexico of an agreement to adopt the new three-country industry classification system.

- Work has progressed with the Bureau of Labor Statistics (BLS) and other researchers to develop improved measures of output and prices that incorporate the effects of quality change. BEA has introduced new quality-adjusted measures of output and prices for semi-conductors and telephone switching equipment and updated and improved measures of hospital care and nursing homes.
- o **Better Measures of Investment, Saving, and Wealth:** As part of the comprehensive revision, BEA also introduced a more comprehensive and consistent treatment of investment and capital--by treating government purchases of structures and equipment symmetrically with private purchases and by introducing an improved empirical basis for its estimates of capital stocks and depreciation. Summary estimates of capital stocks, incorporating the improvements made in the GDP benchmark revision, were published.
- o **Improved Measures of International Trade and Finance:** Work has moved ahead on improvements in the coverage of new products and services:
  - BEA conducted, processed, and, in FY 1996, incorporated into the balance of payments accounts the results of its first benchmark and annual surveys of international trade in financial services.
  - BEA revised its benchmark survey of selected international services transactions to cover several new services.
  - BEA incorporated the results of a survey (developed in conjunction with the Treasury Department and the Federal Reserve Bank of New York) of U.S. holdings of selected foreign financial assets.
  - BEA's 1997 annual revision of the U.S. international transactions accounts incorporated the results of the first benchmark survey of U.S. portfolio investment abroad in more than 50 years (conducted by the Treasury Department).
  - BEA incorporated estimates of U.S. currency flows into the balance of payments accounts, based on estimates developed by the Federal Reserve Board.

An outline of BEA's Strategic Plan is presented in the following table, which lists the plan's three major objectives, the actions BEA has proposed to work toward those objectives, significant milestones for fiscal years 1997-99, and actions that have been taken to date.

### Milestones and Actions in BEA's Strategic Plan

This table is based on BEA's Strategic Plan for maintaining and improving its economic accounts, which was developed in concert with data users and data suppliers in 1995. The table lays out BEA's plans, milestones, and progress to date in implementing the three major objectives of the plan: New and improved measures of output and prices, better measures of investment, saving, and wealth, and improved measures of international transactions. (For a full discussion of BEA's Strategic Plan, see the February and April 1995 and June 1996 issues of the *Survey of Current Business*.)

#### Objective: New and improved measures of output and prices

Proposed Actions	1997 Milestones	1998 Milestones	1999 Milestones	Actions to Date
Improvements in projections for missing source data and in seasonal adjustments	<p>Continue work with Census on improved seasonal adjustment</p> <p>Create software and train staff to utilize existing seasonal adjustment programs more effectively</p>	<p>Incorporate new methods into current quarter projections for categories such as inventories and merchandise trade</p> <p>Begin work with BLS on further harmonization of seasonal adjustment factors</p>		<p>Incorporated in BEA's estimates of consumer spending more direct measures of motor vehicle leasing, cellular phone and Internet services, and gambling.</p> <p>Work on projections postponed due to lack of funding for re-engineering (existing and incremental funding was devoted to migrating off BEA's aging mainframe)</p> <p>Improved estimates of seasonally volatile bonuses and other irregular payments</p>
Extension of quality adjustment of prices used in real GDP	Develop new estimates for other high-tech products, such as telecommunications and software, using model pricing or hedonic methods	Continue work on extension of quality adjustments to other high-tech products, such as cellular phones	Continue work on extension of quality adjustments.	Introduced quality-adjusted price and output measures for semiconductors and digital switching equipment

Proposed Actions	1997 Milestones	1998 Milestones	1999 Milestones	Actions to Date
Further conceptual work on difficult-to-measure goods and services		Identify and develop new concepts and methods for measuring difficult-to-measure goods and services, such as nonresidential buildings	Identify and develop new concepts and methods for measuring difficult-to-measure goods and services	<p>BEA and BLS initiated a joint project with the National Bureau of Economic Research on the measurement of medical care</p> <p>BEA and BLS initiated a joint project with the Brookings Institution on the measurement of output in five sectors: finance, insurance, retail trade, transport, and telecommunications</p>
More frequent updating of sample frames for existing surveys, more frequent surveys for services and other sectors, and extension of existing surveys to fill gaps in coverage and to improve product and income measures of output	Work with BLS on expanding coverage of compensation and with Census on expanding coverage of key national accounts source data in services and other expanding sectors	<p>Work with BLS on expanding coverage of compensation and with Census on minimizing loss of key national accounts source data in services and other expanding sectors</p> <p>Work with Census on expanding coverage on key national accounts source data on State and local governments</p> <p>Work with IRS and other data sources on improving the source data on corporate profits, interest, depreciation, and proprietors' income</p>	<p>Work with BLS and other source data agencies on expanding coverage of wages and salaries and employer provided benefits</p> <p>Incorporate new BLS price indexes for services and Census annual surveys of business services and other professional services into improved GDP-by-industry accounts</p>	<p>Incorporated into BEA's national accounts and input-output accounts, the results of surveys that reflect Census' expansion of services data including the 1992 Census of Service Industries, the 1992 Census of Finance, Insurance, and Real Estate Industries, and the 1992 Census of Transportation, Communications, and Utilities, as well as the Services Annual Survey and the Annual Capital Expenditures Survey</p> <p>(Funding has not been forthcoming for updating and expanding source data for either the product- or the income-side measures of GDP and these projects have been successively postponed and/or the plans scaled back)</p>

Proposed Actions	1997 Milestones	1998 Milestones	1999 Milestones	Actions to Date
Introduction of new weighting schemes	<p>Extend chain-weighted estimates to national wealth accounts</p> <p>Extend chain-weighting to regional accounts in gross state product estimates</p>	Improve chain-weighted analytical devices	<p>Improve chain-weighted analytical devices</p> <p>Improve measures of real GDP-by-industry and introduce new measures of industry contribution to real GDP change into GDP-by-industry accounts</p> <p>Introduce new BLS geometric-mean estimates from CPI components into GDP estimates for PCE</p>	<p>Introduced new measures of real GDP that use up-to-date annual--rather than fixed--weights that allow for the effects of changes in relative prices and the composition of output over time and eliminate the substitution bias associated with fixed weights</p> <p>Introduced new measures of real output into BEA's estimates of trade in goods, gross state product, GDP-by-industry, and gross-product of U.S. multinationals</p> <p>Introduced new measures of real depreciation and stocks into BEA's estimates of fixed reproducible wealth</p> <p>Introduced new chain-weighted procedure for measuring recent period quantities and prices that will reduce revisions in estimates for recent periods</p> <p>Introduced several new analytical devices to assist users working with BEA's new chain-weighted indexes</p>
Develop a new industry classification system	Work with Census to redesign forms on the basis of NAICS	<p>Work with BLS, IRS, and Census on NAICS implementation</p> <p>Work with BLS, Census, and OMB to develop a <u>NAICS United States</u> coding manual</p>	<p>Work with BLS, IRS, and Census on NAICS implementation</p> <p>Work with BLS, Census, and OMB to begin developing a product classification system stemming from the NAICS industry classification system</p>	<p>Completed international agreements on NAICS classifications and structure</p> <p>Resolved remaining NAICS issues with industry</p> <p>Completed work with Census on the design of 1997 economic census forms on NAICS basis</p>

Proposed Actions	1997 Milestones	1998 Milestones	1999 Milestones	Actions to Date
Update and better integrate BEA's accounts within the context of new international guidelines	<p>Integrate improvements from the national, GDP-by-industry, and regional accounts into the 1992 benchmark input-output accounts</p> <p>Complete the 1992 benchmark input-output accounts 5 years after the reference year</p>	<p>Continue work on further integration of BEA's industry, regional, and national accounts</p> <p>Develop personal income satellite account</p> <p>Evaluate the role of annual input-output accounts as a framework for further integration</p>	<p>Develop data and systems to prepare estimates for international organizations that are consistent with the 1993 SNA</p> <p>Develop independent estimates of not-for-profit sector</p> <p>Continue work on further integration of BEA's industry, regional, and national accounts</p>	<p>Integrated new chain-weighted and semiconductor indexes, new treatment of government capital, and new depreciation measures, where relevant, into the GDP-by-industry, international, and regional accounts</p> <p>Completed the 1992 benchmark input-output accounts on schedule</p>

**Objective: Better measures of investment, saving, and wealth**

Proposed Actions	1997 Milestones	1998 Milestones	1999 Milestones	Actions to Date
Use of improved depreciation and valuation methods for estimation of fixed reproducible tangible wealth	Expand empirical work on used asset prices to other assets	Prepare presentation software to improve the dissemination of the wealth estimates	Expand empirical work on used asset prices to other assets  Initiate work on improving estimates of inter-sectoral transfers of fixed assets	Improved estimates of wealth and the consumption of fixed capital by introducing a better empirical basis for estimating depreciation and capital stocks
Expand the coverage of investment	Develop initial estimates of computer software	Work with Census on expanding coverage of annual surveys of capital expenditures  Continue long-term improvements in computer software and other types of investment  Initiate work on extending BEA's partial estimates of government and nonprofit institutions capital services  Initiate research on developing regional capital stock estimates consistent with the national accounts	Work with Census on expanding coverage of annual surveys of capital expenditures  Incorporate improvements in the treatment of computer software into the NIPA's	Provided a more complete and consistent measure of investment by treating government expenditures for equipment and structures symmetrically with private investment  (Funding has not been forthcoming for work on computer software, and BEA's work plan has been scaled down and stretched out)
Integration of real and financial accounts	Develop initial stock-flow reconciliation estimates from the national income, product, and tangible wealth accounts	Continue work on integration of real and financial accounts	Continue work on integration of real and financial accounts	Developed with the Federal Reserve a framework for a full set of accounts for the government sector based on international recommendations  (Funding has not been forthcoming for work on integration, and BEA's work plan has been scaled down and stretched out)

**Objective: Improved measures of international transactions**

Proposed Actions	1997 Milestones	1998 Milestones	1999 Milestones	Actions to Date
Extension and revision of existing surveys and forms to cover new products, services, and financial instruments	<p>Develop estimates of the full market value of computer software based on revised methods and source data</p> <p>For foreign direct investment in the United States, revise surveys to provide information on trade in "affiliated" services by type</p> <p>Incorporate NAICS in benchmark survey design</p> <p>Conduct extended selected services benchmark survey and incorporate results into national and international accounts</p> <p>Develop revised and extended selected services annual survey to be consistent with coverage of the extended benchmark survey</p>	<p>For U.S. direct investment abroad, publish benchmark survey results on trade in "affiliated" services by type</p> <p>For foreign direct investment in the United States, conduct revised surveys</p> <p>Conduct extended selected services annual survey and incorporate results into national and international accounts</p>	<p>For U.S. direct investment abroad, publish annual series on trade in "affiliated" services by type</p> <p>For foreign direct investment in the United States, use NAICS in the presentation of benchmark survey results</p> <p>For U.S. direct investment abroad, incorporate NAICS in benchmark survey design</p> <p>Extend existing annual selected services surveys to cover key categories on a quarterly basis</p> <p>Work with Treasury and the Federal Reserve to identify and eliminate gaps and overlaps between direct investment and portfolio investment</p> <p>Work with Treasury and the Federal Reserve to design and conduct a follow-on survey of selected financial instruments of banks</p>	<p>Revised the import classification system to provide a separate category for computer software</p> <p>Developed prototype estimates of the full market value of computer software</p> <p>Added estimates of the transportation of goods by truck between the United States and Canada</p> <p>Extended benchmark and annual surveys of selected services to cover expanding international trade in services including those in language translation, oil spill and toxic cleanup, satellite photography, security, actuarial, and account collection</p> <p>Revised benchmark and quarterly surveys of U.S. direct investment abroad and foreign direct investment in the United States to cover trade in services by type within multinational corporations</p> <p>Used existing market data to introduce new estimates of private placements of securities</p> <p>Began work with Treasury, the Federal Reserve, and the business community on derivatives</p>



Proposed Actions	1997 Milestones	1998 Milestones	1999 Milestones	Actions to Date
Extension of data exchanges with other countries and central banks	Incorporate data, as appropriate, from countries adopting new standardized definitions	Incorporate data, as appropriate, from countries adopting new standardized definitions		Continued work with IMF and other countries on coordinated definitions
Development of new surveys	<p>Incorporate results from annual financial services survey</p> <p>Incorporate results from new benchmark survey of U.S. portfolio investment abroad</p> <p>Finalize design of internationally coordinated benchmark survey</p> <p>Work with Treasury to design a pilot survey of positions and transactions in financial derivatives</p>	<p>Collect and process data from internationally coordinated benchmark survey</p> <p>Update methodology for estimating medical services</p> <p>Continue to work with Treasury on design of a pilot survey on financial derivatives</p> <p>Design and conduct survey of U.S. residents' foreign travel expenditures</p> <p>Work with Census in developing survey-based estimates for low-value exports and imports of goods</p>	<p>Continue processing data from internationally coordinated benchmark survey and analyze preliminary data</p> <p>Build on results of pilot survey to develop a cost-effective means of collecting data on derivatives and new financial instruments</p> <p>Implement new method of estimating medical services</p> <p>Work with Census in developing survey-based estimates of low-value exports and imports of goods</p>	<p>Incorporated data from the benchmark and annual financial services surveys into the balance of payments accounts</p> <p>Developed annual financial services survey</p>